UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/228,821	01/11/99	WENZEL	D 3596.02-1

EXAMINER	
JOHNSON, I	
ART UNIT	**PAPER NUMBER**
1764	19

IM52/0214

HOWARD M PETERS
PETERS VERNY JONES & BIKSA
385 SHERMAN AVENUE SUITE 6
PALO ALTO CA 94306-1840

DATE MAILED: 02/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/228,821	Applicant(s) WENZEL, DEBORAH	
	Examiner Jerry D. Johnson	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 59-77* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 59-77* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

The request filed on December 15, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/228,821 is acceptable and a CPA has been established. An action on the CPA follows.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 59, 61, 64, 65, 68, 69, 75 and 76 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Steinmann.

Steinmann, U.S. Patent 6,017,368, teaches low viscosity, stable W/O microemulsion fuels made from mixing diesel oil or fuel oil with additives (column 4, lines 16-20). The microemulsion fuel composition comprises: about 50 to 90% diesel oil or fuel oil, an anionic surfactant prepared from the partial neutralization of 60 to 70 mole percent of unsaturated fatty acid with ammonia such that there results both free fatty acids and the ammonium salts of the fatty acids. The ammonium salts of the fatty acids which represent the anionic surfactant comprise about 4 to 12% by weight of the microemulsion fuel. The free fatty acids comprise about 2 to 6% by weight of the microemulsion. Long chain water-insoluble or slightly soluble in

water aliphatic alcohols with melting points below 0° C., for example, octanol-1, comprising 2 to 8% by weight of the microemulsion. Water-soluble aliphatic alcohols such as methanol and ethanol comprising about 5 to 14% of the microemulsion fuel. Total water in the microemulsion comprising about 1 to 10% of the microemulsion fuel. Urea Nox scavenger comprising about 0.1 to 4.0% by weight of the microemulsion fuel. Column 5, lines 21-65. Examples of some water-insoluble aliphatic alcohols besides octanol-1 are amyl alcohol, hexanol-1, octanol-2, 2-ethylhexanol-1, nonanol-2 and nonanol-3 (column 7, lines 26-30). When ethanol is used it is preferred to use it in a blend with methanol such as in v/v 75/25 methanol/ethanol blend. It is preferred to use 95% ethanol which is more economical and practical to sue compared to 100% ethanol since microemulsions already contain water (column 7, lines 41-45).

As noted above, Steinmann teaches microemulsion fuel compositions which reasonable appear to be either the same as or an obvious variation of the instantly claimed compositions. Accordingly, applicant's claims if not anticipated by 35 U.S.C. § 102, would be obvious under 35 U.S.C. § 103.

Claims 62, 63, 66, 67 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steinmann.

Steinmann, U.S. Patent 6,017,368, teaches low viscosity, stable W/O microemulsion fuels made from mixing diesel oil or fuel oil with additives, but differs from the instant claims in not specifically disclosing the claimed ratio of additives. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to follow the teachings of Steinmann and arrive at a composition having the claimed ratio of additives because those composition are encompassed by the teachings of Steinmann.

Claims 1, 59, 60, 62-64, 66-68, 70, 71 and 73-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wenzel et al.

Wenzel et al, U.S. Patent 4,083,698, teach liquid fuel compositions comprising a mixture of hydrocarbons, such as gasoline, diesel fuel, or fuel oil; water; preferably a water-soluble alcohol; and a combination of surface-active agents (column 1, lines 19-24). The fuel composition has a viscosity similar to that of a hydrocarbon fuel itself (column 2, lines 63-65). The combination of surface-active agents comprises (1) a long-chain fatty acid salt, or, more preferably an ammonium or sodium long-chain fatty acid salt, or mixtures thereof; (2) a free unsaturated long-chain fatty acid, or a mixture of a free unsaturated organic acid and a free saturated long-chain fatty acid; and (3) a non-ionic surfactant typified by ethylene oxide condensation products and esterification products of a fatty acid with ethylene oxide (column 3, lines 30-38). Although oleic acids is most preferred, both as the free acid, and in combination with the ammonium and sodium hydroxide to form the salts, other unsaturated acids having from about 12-18 carbon atoms, such as linoleic may be used as well as mixtures of these acids. Also, saturated long-chain fatty acids having from about 12-18, such as stearic palmitic, myristic or lauric acids or mixtures thereof, may be used in combination with greater amounts of unsaturated acids (column 3, lines 49-52). The ethylene oxide condensation products which may be used include fatty alcohols having 12 to 18 carbon atoms (column 4, lines 7-38). Although methanol is preferred, the other water-soluble alcohols, such as ethanol, isopropanol, and mixtures of these, can be used (column 5, lines 54-56). While the amount of surface-active agents required must depend on the amounts of water and alcohol used in the fuel compositions, it is generally preferred that the ratio of the condensation products to the ammonium and/or mixture of

ammonium and sodium salts of the saturated or unsaturated long-chain fatty acids be in the range of 1:2 to 3:1 by weight (column 5, line 66 to column 6, line 4). The alcohol can be added as a solution in water or it can be added separately (column 8, lines 10-13). Column 17, lines 15-19, teach that the addition of either ethanol or isopropanol stabilized emulsions at –24° C and that water or methanol could be added by neither one of those stabilized the emulsion unless ethanol or isopropanol was also added.

While Wenzel et al differ from the instant claims in not requiring the presence of both ethanol and a straight or branched chain alcohol having between 3 and 5 carbon atoms, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include both ethanol and isopropanol in a fuel composition as taught by Wenzel et al because Wenzel et al specifically teach that mixtures of alcohols may be used.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 59-77 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 59-77 are directed to a composition which comprises diesel fuel and an additive. Claims 1 and 59-77 recite that "the additive when combined with mixing with diesel fuel form a clear, stable microemulsion fuel composition", yet the claims do not appear to require the presence of water.

Claim 77 lacks antecedent basis for the specifically recited fatty acids, i.e, claim 1, from which claim 77 depends, defines the fatty acids as having the structure R – (C = O) – OH,

wherein R is alkyl having between about 10 to 24 carbon atoms. Fatty acids wherein R is alkyl do not include the unsaturated acids of claim 77.

The citation of U.S. Patent 4,406,519 to Shaw entitled "PROJECTION SCREEN ASSEMBLY", is not pertinent to the claimed invention and has not been made of record. Additionally, the information disclosure statement fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. Accordingly, German 2511249, France 2453210 and 2493863 have not been considered.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (703) 308-2515. The examiner can normally be reached on 6:00-3:30, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knobe can be reached on (703) 308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-5408 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jerry D. Johnson
Primary Examiner
Art Unit 1764

JDJ
February 12, 2001